

## **MAGNETIC MIRROR FOR FOR PROTECTION OF CONSUMABLE PARTS DURING PLASMA PROCESSING**

### **ABSTRACT OF THE DISCLOSURE**

An apparatus for plasma processing of a wafer includes an annular structure  
5 including a magnet, where the structure is concentric with the wafer holder; the magnet  
generates a magnetic field for deflecting charged particles incident on the structure,  
thereby preventing damage to the structure by those particles. Accordingly, the structure  
may be of a material susceptible to erosion during the plasma processing, so that the  
magnetic field reduces that erosion. The cost of consumable parts in the apparatus is thus  
10 reduced. The annular structure may be characterized as a ring having a groove formed  
therein, with the magnet disposed in the groove. The magnet may be either a permanent  
magnet or an electromagnet.